



Bachelor of Science in Data Science - Psycho-informatics

The interdisciplinary Bachelor of Science in Data Science at MSU goes beyond data analytics and embraces a vision in which data become the power behind the digital transformation of every field of human endeavor. The concentration in Psycho-informatics mines and analyses smart phone, social media, and online experimental data to improve understanding of psychological traits such as personality and mood. Students will be prepared to apply data science within psychology or pursue advanced work with cognitive science and psychology.

Freshman Year

Fall Semester			Spring Semester		
EN 1103	English Composition I	3	EN 1113	English Composition II	3
MA 1713	Calculus I	3	MA 1723	Calculus II	3
DSCI 2013	Data Science Literacy	3	PHI 1113	Intro to Logic	3
— —	Natural Science 1 + Lab	3	— —	Natural Science 2 + Lab	3
— —	Fine Arts	3	CSE 1284	Introduction to Programming	4

Sophomore Year

Fall Semester			Spring Semester		
— —	Social Science	3	MA/ST 3123	Statistical Inference	3
MA 2733	Calculus III	3	MA 3113	Intro to Linear Algebra	3
DSCI 3013	Fundamentals of Data Acquisition	3	BIS 3233	Management Information Systems	3
DSCI 2012	Lab - Data Wrangling	2	DSCI 4013	Data Visualization	3
CSE 1384	Intermediate Programming	4	CSE 2383	Data Structures and Analysis of Algorithms	3

Junior Year

Fall Semester			Spring Semester		
CSE 2813	Discrete Structures	3	CSE 3763	Legal & Ethical Issues Computing	3
DSCI 3012	Lab - Desc., Analysis, Inference	2	CO 1003	Fundamentals of Public Speaking	3
DSCI 3022	Lab - Data Visualization	2	DSCI 3032	Lab - Artificial Intelligence	2
PSY 1021	Careers in Psychology	1	CSE 4503	Database Management Systems	3
CSE 4633	Artificial Intelligence	3	PSY 3104	Introductory Psychological Stats	4
— —	Humanities	3	DSCI 2022	Lab - Cloud, Quantum, HPC	2

Senior Year

Fall Semester			Spring Semester		
MGT 3213	Organizational Communication	3	MA/ST 4523	Intro to Probability	3
PSY 3314	Experimental Psychology	4	PSY 3343	*Psychology of Learning	3
PSY 3623	*Social Psychology	3	PSY 3713	*Cognitive Psychology	3
— —	4000 level Psychology course	3	— —	4000 level Psychology course	3
PSY 4000	Directed Individual Study in Psychology	6			

***Choose 9 hours from the following 3 hour courses:**

PSY 3343 Psychology of Learning

PSY 3623 Social Psychology

PSY 3713 Cognitive Psychology

PSY 3803 Intro to Developmental Psych

PSY 4403 Biological Psychology